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REMARKS

Claims 68-77, 86-95, 104-113 and 122-131 are pending. Claims 68, 74, 86, 92, 104, 110, 122 and 128 are amended, as follows:

Claims 68, 86, 104 and 122 have been amended, as suggested by the Examiner, to recite that the variant "has at least 80% identity to said parent alpha-amylase." Support for this amendment is found in the specification and claims as originally filed, including in the specification at page 4, lines 3-14, page 5, lines 24-30 and page 10, lines 13-19.

Clams 74, 92, 110 and 128 have been amended, as suggested by the Examiner, to recite "An isolated alpha-amylase comprising an alpha-amylase of claim 73 [or 91, 109, 127, respectively] having amino acid substitutions of cysteine at positions equivalent to 349 and 428 in SEQ ID NO:3."

It is respectfully submitted that the present amendment presents no new issues or new matter and places this case in condition for allowance. Reconsideration of the application in view of the above amendments and the following remarks is requested.

I. The Rejection of Claims 74, 92, 110 and 128 under 35 U.S.C. 112 as Indefinite

Claims 74, 92, 110 and 128 are rejected under 35 U.S.C. 112 as being indefinite. The Examiner states that the claims are confusing and improperly dependent because they recite limitations which are excluded from the genus of alpha-amylases of the claims from which they depend. The Examiner suggests amending the claims to recite "An isolated alpha-amylase comprising an alpha-amylase of claim 73 [or 91, 109 or 127] having an amino acid substitution of cysteine at positions equivalent to 349 and 428 of SEQ ID NO:3."

Applicants respectfully submit that claims 74, 92, 110 and 128 were intended to incorporate all of the limitations of the claims from which they depend, claims 73, 91, 109 and 127, respectively. Applicants have adopted the Examiner's suggestions for amending claims 74, 92, 110 and 128.

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

II. The Rejection of Claims 68-72, 86-90, 104-108 and 122-126 under 35 U.S.C. 112 (Written Description)

Claims 68-72, 86-90, 104-108 and 122-126 are rejected under 35 U.S.C. 112, as lacking written description support. The Examiner states that the claims include variants with any number



of alterations of the parent enzyme. On page 7 of the Office Action, the Examiner suggests amending claims 68, 86, 104 and 122 to overcome the 35 U.S.C. 112, first paragraph rejections by reciting that the variant "has at least 80% sequence identity to said parent alpha-amylase."

In order to expedite prosecution, Applicants have amended claims 68, 86, 104 and 122 to recite that the variant "has at least 80% identity to said parent alpha-amylase."

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

III. The Rejection of Claims 68-72, 86-90, 104-108 and 122-126 under 35 U.S.C. 112 (Enablement)

Claims 68-72, 86-90, 104-108 and 122-126 are rejected under 35 U.S.C. 112, as lacking enablement. The Examiner states that claims include variants with any number of alterations of the parent enzyme. The Examiner states that the claims are enabled for a variant of a parent alpha-amylase having at least 80% homology to SEQ ID NO:3 and having at least 80% identity to said parent. On page 7 of the Office Action, the Examiner suggests amending claims 68, 86, 104 and 122 to overcome the 35 U.S.C. 112, first paragraph rejections by reciting that the variant "has at least 80% sequence identity to said parent alpha-amylase."

In order to expedite prosecution, Applicants have amended claims 68, 86, 104 and 122 to recite that the variant "has at least 80% identity to said parent alpha-amylase."

For the foregoing reasons, Applicants submit that the claims overcome this rejection under 35 U.S.C. 112. Applicants respectfully request reconsideration and withdrawal of the rejection.

IV. Obviousness-Type Double Patenting Rejection

Claims 68-71, 73, 75-77, 86-89, 91, 93,-95, 104-107, 109, 111-113, 122-125, 127 and 129-131 are rejected under 35 U.S.C. 112 for obviousness-type double patenting over claims 21-23 of U.S. Patent No. 6,297,038.

In order to expedite prosecution, a terminal disclaimer over U.S. Patent No. 6,297,038 is submitted herewith.

For the foregoing reasons, Applicants submit that the claims overcome this rejection. Applicants respectfully request reconsideration and withdrawal of the rejection.

V.

Conclusion DEST AVAILABLE COPY

In view of the above, it is respectfully submitted that all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,

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